

### REMARKS

The amendment filed September 1, 2005 is objected to under 35 U.S.C. § 132(a) because it introduces new matter into the disclosure. Claim 56 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claims 26, 27, 29, 30 and 32-92 are pending in the Application. Claims 67, 72, 76, 74, 77, 78, 81, 82, 85, and 86-89 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 6,604,580 and U.S. Patent No. 6,688,388. Claims 46, 47, 68, and 71 are objected to because of informalities. Claims 40, 42, 43, 44, 45, and 49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith (U.S. Patent No. 5,435,400) in view of Stanley (U.S. Patent No. 5,411,104). Claims 40, 41, 46-48, 50, and 61 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mueller et al. (U.S. Patent No. 5,355,967) in view of Stanley. Claims 40, 42, 43, 51, and 52 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Allen (U.S. Patent No. 4,134,463) in view of Stanley. Claims 26, 27, 29, 30, 32-39, 53-55, 57, 58, 59, 60, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 79, 83, and 90-92 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith in view of Stanley. Claims 74, 77, 78, 81, 82, and 85 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith in view of Stanley as applied to claims 26, 35, and 54, and further in view of Murray (U.S. Patent No. 5,785,133). Claims 26, 76, 35, 80, 54, and 84 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Stanley in view of Campbell (U.S. Patent No. 3,534,822). Claims 86-88 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Stanley in view of Murray and Campbell. Applicant respectfully requests reconsideration of the Application in view of the amendments and remarks herein.

### ***Rejection - 35 U.S.C. § 132(a) / 35 U.S.C. 112***

The amendment filed September 1, 2005 is objected to under 35 U.S.C. § 132(a) because it introduces new matter into the disclosure. Claim 56 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Applicant cancels

claim 56 in the interest of expediting prosecution but does not concede that the claimed subject matter is not supported/described in the disclosure of the application.

### ***Double Patenting***

Claims 67, 72, 76, 74, 77, 78, 81, 82, 85, and 86-89 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 6,604,580 and U.S. Patent No. 6,688,388. Applicant requests that the noted double-patenting rejections be held in abeyance until the end of substantive prosecution. Applicant will address obviousness-type double patenting rejections of otherwise allowable claims with terminal disclaimers at that time.

### ***Informalities***

Claims 46, 47, 68, and 71 are objected to because of informalities. Applicant respectfully submits that the informalities in these claims have been remedied, and requests these objections be withdrawn.

### ***Claim Rejections – 35 U.S.C. § 103(a)***

#### **Smith in view of Stanley, alone or in further combination with Murray**

Claims 40, 42, 43, 44, 45, and 49 are rejected under 35 U.S.C. §103(a) as being unpatentable over Smith in view of Stanley. Claims 26, 27, 29, 30, 32-39, 53-55, 57-60, 62-73, 75, 79, 83, and 90-92 are also rejected under 35 U.S.C. §103(a) as being unpatentable over Smith in view of Stanley. Claims 74, 77, 78, 81, 82, and 85 are rejected under 35 U.S.C. §103(a) as being unpatentable over Smith in view of Stanley as applied to claims 26, 35, and 54, and further in view of Murray.

Applicant respectfully traverses these rejections for at least the following reasons.

In response to Applicant's previous response against the combination of Smith with Stanley, the Examiner suggests that Stanley indicates that overbalance drilling rather than the use of liquid drilling fluids creates problems in drilling in coal seams. Applicants respectfully

submit that this is a mischaracterization of Stanley's teachings. Rather Stanley teaches: (1) that using a liquid drilling system damages the near wellbore area; (col. 3, lines 30-35); (2) all of the limited number of mud-drilled horizontal coalbed methane wells attempted in the San Juan basin were economic failures (col. 3, lines 50-53); (3) lateral holes drilled using gas-driven drilling motors will have a higher flow capacity than liquid-drilled wells due to reduction or elimination of near wellbore damage (col. 4, lines 34-46); (4) gas drilling avoids formation of a mudcake on borehole walls (col. 6, lines 10-12); and (5) liquid based drilling can reduce formation permeability as non-native water can cause clays to swell in clay and, with oil base muds, the coal itself will swell (col. 6, lines 15-22). Thus, Stanley teaches that liquid based drilling is inappropriate and unsuccessful for use in coal formations. Stanley further teaches that overbalance drilling exacerbates the problems resulting in the failure of liquid based drilling (col. 3, lines 60 – 66).

As the Examiner knows, to establish a prima facie case of obviousness there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Moreover, it is improper to combine references where the references teach away from their combination. In re Grasselli, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983).

In rejecting claims 40, 42, 43, 44, 45, and 49 as obvious over Smith in view of Stanley, the Examiner has suggested that one of skill in the art would be motivated to apply the method of Smith in a coal seam because Stanley teaches that coal seams can be drilled to obtain gas. Smith describes a liquid based system. As discussed above, Stanley specifically teaches away from the use of liquid based drilling systems in coal seams. Therefore, based on Stanley's teachings, one of ordinary skill in the art at the time of the invention would not have reasonably expected

success in using Smith's drilling system in a coal seam and Stanley teaches away from combination with Smith's liquid based drilling systems. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 40, 42, 43, 44, 45, and 49 as obvious over Smith in view of Stanley. For at least the same reasons, Applicant also respectfully requests withdrawal of the rejection of claims 26, 27, 29, 30, 32-39, 53-55, 57-60, 62-73, 75, 79, 83, and 90-92 as rejected under 35 U.S.C. §103(a) as being unpatentable over Smith in view of Stanley.

Claims 74, 77, 78, 81, 82, and 85 are rejected under 35 U.S.C. §103(a) as being unpatentable over Smith in view of Stanley as applied to claims 26, 35, and 54, and further in view of Murray. Murray does not remedy the deficiency of Stanley. Applicant submits that one of ordinary skill in the art would clearly not be led by Stanley to any combination with Smith alone or further combination with Murray for at least the reasons discussed above regarding the proposed combination of Smith and Stanley. Accordingly, Applicant respectfully requests that the rejections of claims 74, 77, 78, 81, 82, and 85.

Mueller in view of Stanley

Claims 40, 41, 46-48, 50, and 61 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mueller et al. in view of Stanley. Like Smith discussed above, Mueller discloses a liquid based system. Accordingly, Stanley teaches away from combination with Mueller, and Applicant respectfully requests that the rejections to claims 40, 41, 46-48, 50, and 61 based on Mueller in view of Stanley be reconsidered and withdrawn.

Allen in view of Stanley

Claims 40, 42, 43, 51, and 52 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Allen in view of Stanley. Like Smith discussed above, Allen discloses a liquid based system. Accordingly, Stanley teaches away from combination with Allen, and Applicant respectfully requests that the rejections to claims 40, 42, 43, 51 and 52 based on Allen in view of Stanley be reconsidered and withdrawn.

Stanley in view of Campbell, alone or in further combination with Murray

Claims 26, 76, 35, 80, 54, and 84 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Stanley in view of Campbell. Claims 86-88 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Stanley in view of Murray and Campbell. Campbell teaches reducing the density of a drilling fluid by introducing a gas into the drilling fluid. (See col. 1, lines 4-7). Compressed air flows "into the rising liquid forming air bubbles which greatly reduce the density of the liquid and, hence, the hydrostatic head of the fluid in the well bore." (Col. 2, lines 5-8). As discussed above, Stanley teaches using gas as the drilling fluid. Thus, modifying Stanley to a system using a liquid-based drilling fluid would require changing the principle of operation of Stanley. As the Examiner knows, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. See *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). Accordingly, Applicant respectfully requests that the rejections to claims 26, 76, 35, 80, 54, 84, and 86-88 based on the combination of Stanley in view of Campbell alone or in combination with Murray be reconsidered and withdrawn.

***Conclusion***

For at least the reasons discussed above, Applicant respectfully submits that the claims are in condition for allowance, and requests such a Notice. If the present Application is not allowed and/or if one or more of the rejections is maintained or made final, Applicant hereby requests a telephone conference with the Examiner and further requests that the Examiner contact the undersigned attorney to schedule a telephone conference.

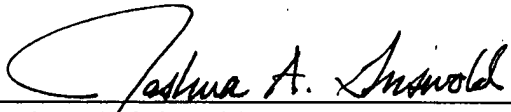
Enclosed is a Petition for Two-Month Extension of Time and a check for \$450 in payment of the extension fee. Please apply any deficiencies or any other required fees or any credits to deposit account 06-1050, referencing the attorney docket number shown above.

Applicant : Joseph A. Zupanick  
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Page : 20 of 20

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Respectfully submitted,

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